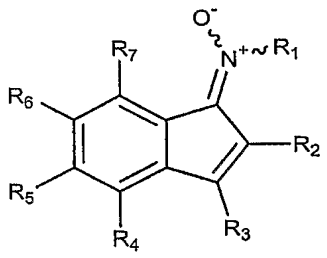
What is claimed is:

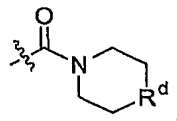
1. An indene derivative of formula (I) or a pharmaceutically acceptable salt thereof:

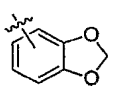
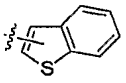


(I)

wherein,

R_1 is C_{1-6} alkyl, C_{1-6} alkenyl or C_{3-6} cycloalkyl, which is unsubstituted or substitutied with one or more phenyl groups;

R_2 is H, CN, CO_2R^a, $CH_2CO_2R^a$, $CONR^bR^c$,  , or phenyl;

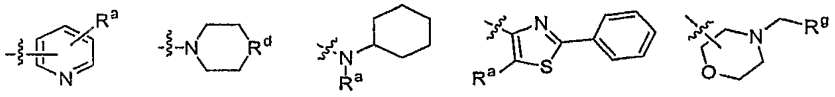
R_3 is C_{1-6} alkyl, C_{3-6} cycloalkyl, or naphthyl, phenyl,  ,  ,  ,  ,  or  , which is unsubstituted or substitutied with one or more substituents selected from the group consisting of halogen, CN, NH_2, NO_2, OR^a, phenyloxy, C_{1-6} alkyl and C_{3-6} cycloalkyl; and

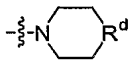
R_4, R_5, R_6 and R_7 are each independently H, OH, OSO_2CH_3, $O(CH_2)_mR^e$, CH_2R^f, $OCOCH_2OR^g$, $OCH_2CH_2OR^g$ or $OCH_2CH=CHR^g$, or R_5 and R_6 together form OCH_2O;

in which R^a is H, or C_{1-6} alkyl or C_{3-6} cycloalkyl, which is unsubstituted or substitutied with one or more halogens;

R^b and R^c are each independently H, C_{1-6} alkyl or C_{3-6} cycloalkyl;

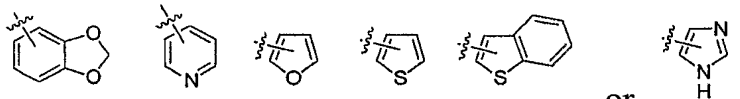
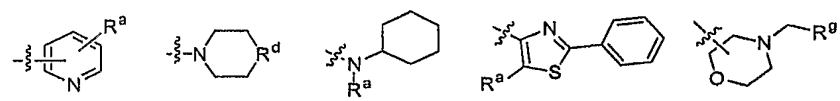
R^d is O, S or NR^a;

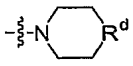
R^e is H, halogen, C_{3-6} cycloalkyl, naphthyl,  , or phenyl, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, CN, NH_2, NO_2, OR^a, CF_3 and $COOR^a$;

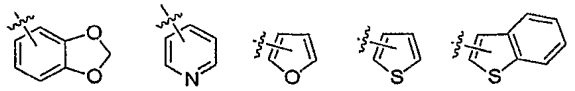
R^f is $OCH_2CH_2R^g$ or  ;

R^g is phenyl, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, CN, NH_2, NO_2 and OR^a; and

m is an integer in the range of 1 to 5.

2. The compound of claim 1, wherein R_1 is C_{1-6} alkyl, which is unsubstituted or substitutied with a phenyl group; R_2 is H, CN, CO_2R^a, $CH_2CO_2R^a$, $CONR^bR^c$ or phenyl; R_3 is C_{1-6} alkyl, C_{3-6} cycloalkyl, or phenyl,  , which is unsubstituted or substitutied with one or more substituents selected from the group consisting of halogen, C_{1-6} alkyl and C_{3-6} cycloalkyl; R_4 and R_7 are H; R_5 and R_6 are each independently OH, OSO_2CH_3, $O(CH_2)_mR^e$, CH_2R^f, $OCOCH_2OR^g$, $OCH_2CH_2OR^g$ or $OCH_2CH=CHR^g$, or together form OCH_2O; R^a is H, or C_{1-6} alkyl; R^d is O or NCH_3; R^e is H, halogen, C_{3-6} cycloalkyl, naphthyl,  , or phenyl, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, OH, methoxy, CF_3 and $COOR^a$; R^f is $OCH_2CH_2R^g$

or  ; and R^g is phenyl.

3. The compound of claim 2, wherein R_1 is CH_3; R_2 is H, CN, CO_2R^a or $CONR^bR^c$; R_3 is C_{1-6} alkyl, or phenyl,  or  , which is unsubstituted or substitutied with one or more halogens or C_{1-6} alkyl groups; and R_5 and R_6 are each independently $O(CH_2)_mR^e$ or CH_2R^f, or together form OCH_2O.

4. The compound of claim 1, which is selected from the group consisting of:

1) 6-methoxy-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

2) 1-(*trans*-isopropylimino-*N*-oxy)-6-methoxy-3-phenyl-1H-indene-2-carboxylate ethyl ester

3) 1-(*trans*-benzylimino-*N*-oxy)-6-methoxy-3-phenyl-1H-indene-2-carboxylate ethyl ester

4) 1-(*trans*-ethylimino-*N*-oxy)-6-methoxy-3-phenyl-1H-indene-2-carboxylate ethyl ester

5) 6-methoxy-1-(*trans*-phenylpropylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

6) 6-methoxy-1-(*trans*-(2-methylbutenylimino)-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

7) 1-(*trans*-isobutylimino-*N*-oxy)-6-methoxy-3-phenyl-1H-indene-2-carboxylate ethyl ester

8) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morphorline-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

9) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

10) 1-(*trans*-methylimino-*N*-oxy)-6-phenetyloxy-3-phenyl-1H-indene-2-carboxylate ethyl ester

11) 3-furan-3-yl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

12) 6-hydroxy-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

13) 1-(*cis*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

14) 3-(*trans*-methylimino-*N*-oxy)-1-phenyl-3H-indene-5-ol

15) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(5-phenylpentyloxy)-1H-indene-2-carboxylate ethyl ester

16) 1-(*cis*-methylimino-*N*-oxy)-3-phenyl-6-(5-phenylpentyloxy)-1H-indene-2-carboxylate ethyl ester

17) 6-[2-(4-chlorophenoxy)acetoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

18) 6-[2-(4-chlorophenoxy)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

19) 1-(*trans*-methylimino-*N*-oxy)-6-(naphthalene-2-ylmethoxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

20) methyl-[3-phenyl-6-(3-phenylpropoxy)indene-1-yllidene]amine-*N*-oxide

21) 1-(*trans*-methylimino-*N*-oxy)-6-[2-(5-methyl-2-phenylthiazol-4-yl)ethoxy]-3-phenyl-1H-indene-2-carboxylate ethyl ester

22) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

23) 6-[2-(4-hydroxyphenyl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

24) 6-(2-adaman-1-ylethoxy)-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

25) 6-(2-cyclohexylethoxy)-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-

2-carboxylate ethyl ester

26) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylprophenoxy)-1H-indene-2-carboxylate ethyl ester

27) 6-[2-(2-fluorophenyl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

28) 6-[2-(3-fluorophenyl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

29) 6-[2-(4-fluorophenyl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

30) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-[2-(3-trifluoromethylphenyl)ethoxy]-1H-indene-2-carboxylate ethyl ester

31) 6-(4-methoxycarbonylbenzyloxy)-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

32) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl amide

33) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

34) 6-[2-(cyclohexylmethylamino)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

35) 3-(2-fluorophenyl)-6-methoxy-1-(*trans*-methylimino-*N*-oxy)-1H-indene-2-carboxylate ethyl ester

36) 1-(*trans*-methylimino-*N*-oxy)-6-[2-(4-methylpiperazine-1-yl)ethoxy]-3-phenyl-1H-indene-2-carboxylate ethyl ester

37) (2,3-diphenyl indene-1-yl lidene)methylamine-*N*-oxide

38) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate isopropyl amide

39) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate cyclohexyl amide

40) [1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-yl]morpholine-4-yl-methanone

41) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-yl-ethoxy)-3-phenyl-1H-

indene-2-carboxylate cyclohexyl amide

42) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-5-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

43) 1-(*trans*-methylimino-*N*-oxy)-6-phenethyloxymethyl-3-phenyl-1H-indene-2-carboxylate ethyl ester

44) (6-methoxy-3-phenylindene-1-yllidene)methylamine-*N*-oxide

45) 1-(*cis*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

46) 6-(2-bromoethoxy)-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

47) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate *tert*-buthyl ester

48) 1-(*trans*-methylimino-*N*-oxy)-5,6-methylenedioxy-1-oxo-3-phenyl-1H-indene-2-carboxylate ethyl ester

49) 4-[2-isopropylcarbamoyl-3-(*trans*-methylimino-*N*-oxy)-1-phenyl-3H-indene-5-yl-oxylmethyl]benzoate methyl ester

50) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate isopropyl amide

51) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate cyclopropyl amide

52) 3-(3-fluorophenyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

53) (6-methoxy-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-yl)acetate ethyl ester

54) (6-methoxy-1-(*cis*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-yl)acetate ethyl ester

55) 5-[2-(5-ethylpyridine-2-yl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate isopropyl amide

56) 1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-3-*p*-tolyl-1H-indene-2-carboxylate ethyl ester

57) 1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-3-thiophene-2-yl-1H-

indene-2-carboxylate ethyl ester

58) 3-(4-chlorophenyl)-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

59) 3-(5-chlorothiophene-2-yl)-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenyl propoxy)-1H-indene-2-carboxylate ethyl ester

60) 1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-3-*m*-tolyl-1H-indene-2-carboxylate ethyl ester

61) 1-(*trans*-methylimino-*N*-oxy)-3-(4-phenoxyphenyl)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

62) 3-benzo-[1,3]-dioxol-5-yl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenyl propoxy)-1H-indene-2-carboxylate ethyl ester

63) methyl-[6-(3-phenylpropoxy)-3-pyridine-2-yl-indene-1-yllidene]-amine-*N*-oxide

64) 3-furan-2-yl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

65) 3-ethyl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

66) 3-methyl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

67) 1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-3-thiophene-3-yl-1H-indene-2-carboxylate ethyl ester

68) 3-cyclopropyl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

69) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-thiophene-3-yl-1H-indene-2-carboxylate ethyl ester

70) 3-benzo-[b]-thiophene-3-yl-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenyl propoxy)-1H-indene-2-carboxylate ethyl ester

71) 3-(1H-imidazole-4-yl)-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

72) 3-(1-ethyl propyl)-1-(*trans*-methylimino-*N*-oxy)-6-(3-phenylpropoxy)-1H-indene-2-carboxylate ethyl ester

73) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carboxylate amide

74) 6-(4-benzylmorpholine-2-ylmethoxy)-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate isopropyl amide

75) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(3-phenylpropoxy)-1H-indene-2-carbonitrile

76) 1-(*trans*-methylimino-*N*-oxy)-5,6-methylenedioxy-1-oxo-3-phenyl-1H-phenyl-2-carboxylate isopropyl amide

77) 1-(*trans*-methylimino-*N*-oxy)-6-morpholine-4-ylmethyl-3-phenyl-1H-indene-2-carboxylate ethyl ester

78) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(2-pyridine-2-ylethoxy)-1H-indene-2-carboxylate ethyl ester

79) 6-[2-(5-ethylpyridine-2-yl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

80) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(2-pyridine-2-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

81) 6-[2-(5-ethylpyridine-2-yl)ethoxy]-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate isopropyl amide

82) methyl-[6-(2-morpholine-4-ylethoxy)-3-phenylindene-1-yllidene]amine-*N*-oxide

83) 5,6-bis-methanesulfonyloxy-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

84) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate isobutyl ester

85) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate methyl ester

86) 1-(*cis*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate methyl ester

87) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate propyl ester

88) 3-(4-fluorophenyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-

ylethoxy)-1H-indene-2-carboxylate ethyl ester

89) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(pyridine-2-ylmethoxy)-1H-indene-2-carboxylate ethyl ester

90) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(pyridine-2-yloxy)-1H-indene-2-carboxylate ethyl ester

91) 6-(3-methoxybenzyloxy)-1-(*trans*-methylimino-*N*-oxy)-3-phenyl-1H-indene-2-carboxylate ethyl ester

92) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-thiophene-3-yl-1H-indene-2-carboxylate isopropyl amide

93) 3-(1-ethylpropyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-yl ethoxy)-1H-indene-2-carboxylate ethyl ester

94) 3-benzo-[b]-thiophene-3-yl-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

95) 3-(4-fluorophenyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

96) 3-(1-ethylpropyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

97) 1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-(2,4,6-trimethylphenyl)-1H-indene-2-carboxylate ethyl ester

98) 3-(2,6-dimethylphenyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-1H-indene-2-carboxylate ethyl ester

99) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-5-(2-pyridine-2-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

100) 1-(*trans*-methylimino-*N*-oxy)-5-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate isopropyl amide

101) 1-(*cis*-methylimino-*N*-oxy)-6-(2-morpholine-4-ylethoxy)-3-phenyl-1H-indene-2-carboxylate isopropyl ester

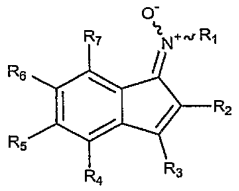
102) 3-(3-fluorophenyl)-1-(*trans*-methylimino-*N*-oxy)-6-(2-pyridine-2-ylethoxy)-1H-indene-2-carboxylate isopropyl amide

103) 6-[2-(5-ethylpyridine-2-yl)ethoxy]-3-(3-fluorophenyl)-1-(*trans*-methylimino-*N*-oxy)-1H-indene-2-carboxylate isopropyl amide

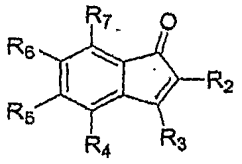
104) 3-(4-cyanophenyl)-6-(2-morpholine-4-ylethoxy)-1-(*trans*-methylimino-*N*-oxy)-1H-indene-2-carboxylate ethyl ester

105) 1-(*trans*-methylimino-*N*-oxy)-3-phenyl-6-(2-pyridine-2-ylethoxy)-1H-indene-2-carboxylate isopropyl ester.

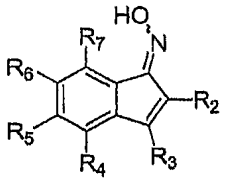
5. A process for preparing the indene derivative of claim 1, which comprises step of subjecting indenone compound of formula (Ⅱ) to a condensation reaction with R_1NHOH or NH_2OH to obtain a compound of formula (Ⅲ), and reacting the compound of formula (Ⅲ) with R_1X:



(Ⅰ)



(Ⅱ)

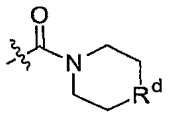


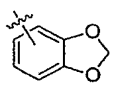
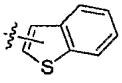
(Ⅲ)

wherein,

X is halogen;

R_1 is C_{1-6} alkyl, C_{1-6} alkenyl or C_{3-6} cycloalkyl, which is unsubstituted or substitutied with one or more phenyl groups;

R_2 is H, CN, CO_2R^a, $CH_2CO_2R^a$, $CONR^bR^c$,  , or phenyl;

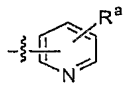
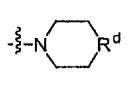
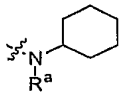
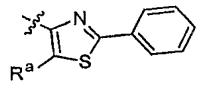
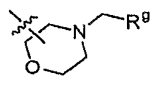
R_3 is C_{1-6} alkyl, C_{3-6} cycloalkyl, or naphthyl, phenyl,  ,  ,  ,  ,  or  , which is unsubstituted or substitutied with one or more substituents selected from the group consisting of halogen, CN, NH_2, NO_2, OR^a, phenyloxy, C_{1-6} alkyl and C_{3-6} cycloalkyl; and

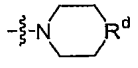
R_4, R_5, R_6 and R_7 are each independently H, OH, OSO_2CH_3, $O(CH_2)_mR^e$, CH_2R^f, $OCOCH_2OR^g$, $OCH_2CH_2OR^g$ or $OCH_2CH=CHR^g$, or R_5 and R_6 together form OCH_2O;

in which R^a is H, or C_{1-6} alkyl or C_{3-6} cycloalkyl, which is unsubstituted or substitutied with one or more halogens;

R^b and R^c are each independently H, C_{1-6} alkyl or C_{3-6} cycloalkyl;

R^d is O, S or NR^a;

R^e is H, halogen, C_{3-6} cycloalkyl, naphthyl,  ,  ,  ,  ,  or phenyl, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, CN, NH_2, NO_2, OR^a, CF_3 and $COOR^a$;

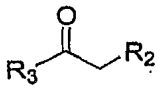
R^f is $OCH_2CH_2R^g$ or  ;

R^g is phenyl, which is unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, CN, NH_2, NO_2 and OR^a; and

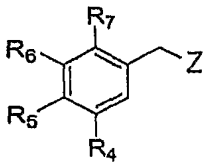
m is an integer in the range of 1 to 5.

6. The process of claim 5, wherein the indenone compound of formula (Ⅱ) is prepared by a process comprising the steps of:

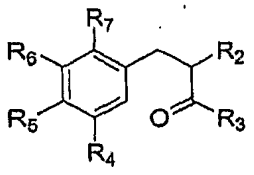
1) reacting compounds of formula (Ⅴ) and (Ⅵ) to obtain a compound of formula (Ⅶ);
2) subjecting the compound of formula (Ⅶ) to cyclization to obtain a compound of formula (Ⅷ); and
3) subjecting the compound of formula (Ⅷ) to oxidation.



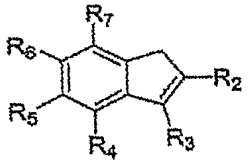
(Ⅴ)



(Ⅵ)



(Ⅶ)



(Ⅷ)

wherein,

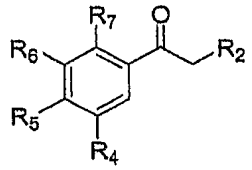
R_2 to R_7 have the same meanings as defined in claim 5, and Z is halogen or activated leaving group.

7. The process of claim 5, wherein the indenone compound of formula (Ⅱ) is prepared by a process comprising the steps of:

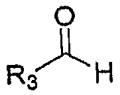
1) reacting compounds of formula (IX) and (X) to obtain a compound of formula (XI);

2) subjecting the compound of formula (XI) to cyclization to obtain a compound of formula (XII); and

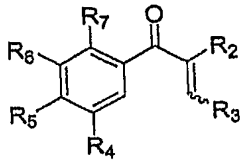
3) subjecting the compound of formula (XII) to oxidation.



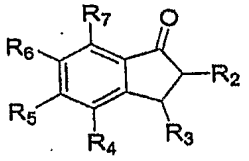
(IX)



(X)



(XI)



(XII)

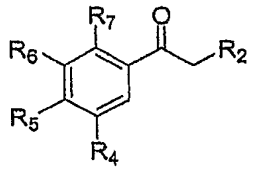
wherein,

R_2 to R_7 have the same meanings as defined in claim 5.

8. The process of claim 5, wherein the indenone compound of formula (II) is prepared by a process comprising the steps of:

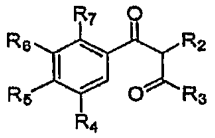
1) reacting compounds of formula (IX) and (XIII) to obtain a compound of formula (XIV); and

2) subjecting the compound of formula (XIV) to cyclization.



(IX)

(XIII)



(XIV)

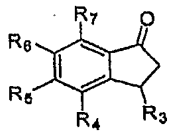
wherein,

R_2 to R_7 have the same meanings as defined in claim 5.

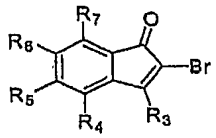
9. The process of claim 5, wherein the indenone compound of formula (II) is prepared by a process comprising the steps of:

1) subjecting a compound of formula (XV) to bromination obtain a compound of formula (XVI); and

2) subjecting the compound of formula (XVI) to a carbon-carbon coupling reaction in the presence of a metal catalyst, or to a substitution reaction using a nucleophile.



(XV)



(XVI)

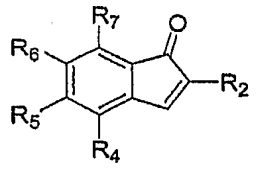
wherein,

R_3 to R_7 have the same meanings as defined in claim 5.

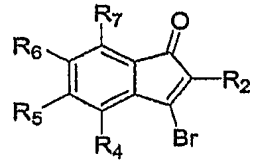
10. The process of claim 5, wherein the indenone compound of formula (Ⅱ) is prepared by a process comprising the steps of:

1) subjecting a compound of formula (XVII) to bromination obtain a compound of formula (XVIII); and

2) subjecting the compound of formula (XVIII) to a carbon-carbon coupling reaction in the presence of a metal catalyst, or to a substitution reaction using a nucleophile.



(XVII)

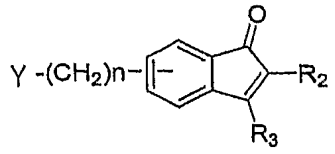


(XVIII)

wherein,

R_2 and R_4 to R_7 have the same meanings as defined in claim 5.

11. The process of claim 5, wherein the indenone compound of formula (Ⅱ) is prepared by subjecting a compound of formula (XIX) to an acylation reaction, a halogenation reaction followed by a substitution reaction by a nucleophile, or a carbon-carbon coupling reaction in the presence of a metal catalyst.



(XIX)

wherein,

R_2 and R_3 have the same meanings as defined in claim 5, Y is hydroxy, thiol, amino C_{1-6} alkyl or halogen, and n is an integer in the range of 0 to 5.

12. A pharmaceutical composition for modulating the activities of peroxisome proliferator activated receptors (PPARs) comprising a therapeutically effective amount of the compound or salt defined in claim 1 as an active ingredient together with a pharmaceutically acceptable carrier.

13. The composition of claim 12, which is used for the treatment and prevention of diabetes, obesity, arteriosclerosis, hyperlipidemia, hyperinsulinism, hypertension, osteoporosis, liver cirrhosis, asthma and cancer.